

L8 55 (AMYLOPULLULANASE?)/AB, BI

=> s (thermoana)/ab, bi
0 (THERMOANA)/AB
0 (THERMOANA)/BI

L9 0 (THERMOANA)/AB, BI

=> s thermoanaerobacter/ab, bi
194 THERMOANAEROBACTER/AB
300 THERMOANAEROBACTER/BI

L10 300 THERMOANAEROBACTER/AB, BI

=> s l9 and l10

L11 0 L9 AND L10

=> file biosis

=> s l11

L12 0 L9 AND L10

=> file ca

=> s (transgen? or agrobacterium or electroporat? or microinject? or microprojec

L13 77964 (TRANSGEN? OR AGROBACTERIUM OR ELECTROPORAT? OR MICROINJECT? OR MICROPROJECT? OR BIOLISTIC?)/AB, BI

=> s l8 and l13

L14 3 L8 AND L13

=> file biosis

=> s l14

L15 1 L8 AND L13

=> dup rem

L16 4 DUP REM L14 L15 (0 DUPLICATES REMOVED)

=> d l16 1-4 ti py

=> d l16 3 4

L16 ANSWER 3 OF 4 CA COPYRIGHT 2003 ACS

AN 136:49340 CA

TI Protein production in ***transgenic*** plant seeds

IN Yu, Su-May; Cheng, Kuo-Joan; Liu, Li-Fei; Shaw, Jei-Fu

PA Academia Sinica, Taiwan

SO Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PI EP 1164194 A2 20011219

EP 2000-311768 20001229

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRAI US 2000-592427 A 20000612

10/050,763
CAJ
Bicini
5/20/03

printed

L16 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 2003:41347 BIOSIS
 DN: PREV200300041347
 TI Production of thermostable ***amylopullulanase*** in
 transgenic rice and its application in starch liquefaction. ✓
 AU Chiang Chih-Ming (1); Yu Su-May (1); Shaw Jei-Fu
 CS (1) 1 Institute of Molecular Biology, Academia Sinica, Nankang, Taipei, 11529, Taiwan: junming@gate.sinica.edu.tw Taiwan
 SO Plant Biology (Rockville), (2001) Vol. 2001, pp. 123-124. print. *5/24*
 Meeting Info.: Joint Annual Meetings of the American Society of Plant Biologists and the Canadian Society of Plant Physiologists Providence, Rhode Island, USA July 21-25, 2001 American Society of Plant Biologists *tm*
 DT Conference
 LA English

=> d l16 2

L16 ANSWER 2 OF 4 CA COPYRIGHT 2003 ACS
 AN 137:120682 CA
 TI Preparation of ***transgenic*** rice to increase phosphate and
 carbohydrate content in seeds
 IN Yu, Sheu Meai; Chen, Kuen-Jian; Liu, Rihe; Shaw, Jiahu
 PA Academia Sinica, Japan
 SO Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002209462	A2	20020730	JP 2000-396318	20001226
PRAI	JP 2000-396318		20001226		

=> s yu, s?/au
 L17 7059 YU, S?/AU

=> s shaw, j?/au
 L18 4223 SHAW, J?/AU

=> s l17 or l18
 L19 11279 L17 OR L18

=> s l19 and l18
 'AB' IS NOT A VALID FIELD CODE
 L20 3 L19 AND L8

=> s l20 not l16
 L21 0 L20 NOT L16

=> file biosis

=> s l21
 L22 0 L20 NOT L21

=> s l20
 L23 1 L19 AND L8

=> s l23 not l15
 L24 0 L23 NOT L15

too late

=> file ca

=> s (gene or genes or cdna? or vector? or clone or clones or cloning)/ab,bi

L25 952739 (GENE OR GENES OR CDNA? OR VECTOR? OR CLONE OR CLONES OR CLONING
)/AB,BI

=> s l25 and l8

L26 21 L25 AND L8

=> file biosis

=> s l26

L27 16 L25 AND L8

=> dup rem

L28 27 DUP REM L26 L27 (10 DUPLICATES REMOVED)

=> d l28 1-27 ti py

=> d l28 ab bib 3 7-9 12 13 16 17 21 24 25 26

L28 ANSWER 7 OF 27 CA COPYRIGHT 2003 ACS

DUPLICATE 2

AN 136:146931 CA

TI Structure and expression of an ***amylopullulanase*** ***gene***
from *Bacillus stearothermophilus* TS-23

AU Chen, Jen-Tao; Chen, Ming-Chu; Chen, Li-Lin; Chu, Wen-Shen

CS Food Industry Research and Development Institute, Hsinchu, 30099, Taiwan

SO Biotechnology and Applied Biochemistry (2001), 33(3), 189-199
CODEN: BABIEC; ISSN: 0885-4513

PB Portland Press Ltd.

DT Journal

LA English

RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 8 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 2003:41347 BIOSIS

DN PREV200300041347

TI Production of thermostable ***amylopullulanase*** in transgenic rice
and its application in starch liquefaction.

AU Chiang Chih-Ming (1); Yu Su-May (1); Shaw Jei-Fu

CS (1) 1 Institute of Molecular Biology, Academia Sinica, Nankang, Taipei,
11529, Taiwan: junming@gate.sinica.edu.tw Taiwan

SO Plant Biology (Rockville), (2001) Vol. 2001, pp. 123-124. print.

Meeting Info.: Joint Annual Meetings of the American Society of Plant
Biologists and the Canadian Society of Plant Physiologists Providence,
Rhode Island, USA July 21-25, 2001 American Society of Plant Biologists

DT Conference

LA English

L28 ANSWER 9 OF 27 CA COPYRIGHT 2003 ACS

AN 132:233594 CA

TI ***Cloning***, sequence and expression of thermostable
amylopullulanase of *Desulfurococcus mucosus* and its use in the
production of sweeteners and ethanol from starch

IN Duffner, Fiona

PA Novo Nordisk A/s, Den.

SO U.S., 21 pp.

CODEN: USXXAM

DT Patent

and abse

printed

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6043074	A	20000328	US 1999-306922	19990507
PRAI US 1999-306922		19990507		

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 12 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:324823 BIOSIS

DN PREV199900324823

TI Isolation and characterization of the ***amylopullulanase***
gene of Bacillus stearothermophilus TS-23.

AU Chen, J. T. (1); Chen, M. C. (1); Chu, W. S. (1)

CS (1) Food Industry Research and Development Institute, Hsinchu Taiwan

SO Abstracts of the General Meeting of the American Society for Microbiology
(1999) Vol. 99, pp. 504-505.

Meeting Info.: 99th General Meeting of the American Society for
Microbiology Chicago, Illinois, USA May 30-June 3, 1999 American Society
for Microbiology

. ISSN: 1060-2011.

DT Conference

LA English

L28 ANSWER 13 OF 27 CA COPYRIGHT 2003 ACS

AN 132:193269 CA

TI Bioengineering of amylase and xylose isomerase thermostzymes

AU Zeikus, J. G.; Savchenko, A.; Sriprapundh, D.; Vieille, Claire

CS MBI International, Lansing, MI, 48910, USA

SO Special Publication - Royal Society of Chemistry (1999), 246 (Recent
Advances in Carbohydrate Bioengineering), 253-262

CODEN: SROCDQ; ISSN: 0260-6291

PB Royal Society of Chemistry

DT Journal; General Review

LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 16 OF 27 CA COPYRIGHT 2003 ACS

DUPLICATE 5

AN 128:305466 CA

TI Purification and properties of an ***amylopullulanase***, a
glucoamylase, and an .alpha.-glucosidase in the amylolytic enzyme system
of Thermoanaerobacterium thermosaccharolyticum

AU Ganghofner, Dirk; Kellermann, Josef; Staudenbauer, Walter L.;
Bronnenmeier, Karin

CS Institute for Microbiology, Technical University of Munich, Munchen,
D-80290, Germany

SO Bioscience, Biotechnology, and Biochemistry (1998), 62(2), 302-308

CODEN: BBBIEJ; ISSN: 0916-8451

PB Japan Society for Bioscience, Biotechnology, and Agrochemistry

DT Journal

LA English

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 17 OF 27 CA COPYRIGHT 2003 ACS

DUPLICATE 6

AN 130:1566 CA

TI Thermostzymes: biotechnology and structure-function relationships

AU Zeikus, J. Gregory; Vieille, Claire; Savchenko, Alexei

CS Department of Biochemistry, Michigan State University, East Lansing, MI,
48824, USA

SO Extremophiles (1998), 2(3), 179-183

CODEN: EXTRFI; ISSN: 1431-0651

PB Springer-Verlag Tokyo

DT: Journal; General Review

LA English

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 24 OF 27 CA COPYRIGHT 2003 ACS

AB The errors were not reflected in the abstr. or the index entries.

AN 121:150299 CA

TI ***Cloning*** and sequencing of the Thermoanaerobacterium
saccharolyticum B6A-RI apu ***gene*** and purification and
characterization of the ***amylopullulanase*** from Escherichia coli.
[Erratum to document cited in CA120:126523]

AU Ramesh, Matur V.; Podkovyrov, Sergey M.; Lowe, Susan E.; Zeikus, J.
Gregory

CS Dep. Biochem., Michigan State Univ., East Lansing, MI, 48824, USA

SO Applied and Environmental Microbiology (1994), 60(8), 3039

CODEN: AEMIDF; ISSN: 0099-2240

DT Journal

LA English

L28 ANSWER 25 OF 27 CA COPYRIGHT 2003 ACS

DUPLICATE 9

AN 120:126523 CA

TI ***Cloning*** and sequencing of the Thermoanaerobacterium
saccharolyticum B6A-RI apu ***gene*** and purification and
characterization of the ***amylopullulanase*** from Escherichia coli

AU Ramesh, Matur V.; Podkovyrov, Sergey M.; Lowe, Susan E.; Zeikus, J.
Gregory

CS Dep. Biochem., Michigan State Univ., East Lansing, MI, 48824, USA

SO Applied and Environmental Microbiology (1994), 60(1), 94-101

CODEN: AEMIDF; ISSN: 0099-2240

DT Journal

LA English

L28 ANSWER 26 OF 27 CA COPYRIGHT 2003 ACS

DUPLICATE 10

AN 119:220384 CA

TI Sequencing of the ***amylopullulanase*** (apu) ***gene*** of
Thermoanaerobacter ethanolicus 39E, and identification of the active site
by site-directed mutagenesis

AU Mathupala, Saroj P.; Lowe, Susan E.; Podkovyrov, Sergey M.; Zeikus, J.
Gregory

CS Dep. Biochem., Michigan State Uni., East Lansing, MI, 48824, USA

SO Journal of Biological Chemistry (1993), 268(22), 16332-44

CODEN: JBCHA3; ISSN: 0021-9258

DT Journal

LA English

=> log y